UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,489	02/18/2004	Alex Simmons	60001.0303US01/MS 302496.	3119

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EXAMINER
HASSAN, AURANGZEB

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/781,489	SIMMONS ET AL.
	Examiner	Art Unit	
	Aurangzeb Hassan	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _18 February 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _18 February 2004_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Supervisory
FRITZ FLEMING
PRIMARY EXAMINER 4/14/2006
GROUP 2100
AU 2181

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4)

because reference character:

"220" has been used to designate both WORD PROCESSOR of figure 1 and

keyboard of figure 2,

"225" has been used to designate both CALENDARING PROGRAM of figure 1

and mouse of figure 2,

"230" has been used to designate both DOCUMENT of figure 1 and touchpad of

figure 2.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they do not include the following reference sign(s) mentioned in the

description: An electronic document as describe for figure 1 is not appropriately labeled

as according to page 30, line 28.. Corrected drawing sheets in compliance with 37 CFR

1.121(d) are required in reply to the Office action to avoid abandonment of the

application. Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is being

amended. Each drawing sheet submitted after the filing date of an application must be

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be

notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims 1 -14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant cites a switching without use input in claims 1 and 2. The examiner notes the initiating switching is in response to a user input in the form of using the pen. The examiner interprets such initiation as user input is unclear how an initiation can occur without additional user input. Claims 3 – 14 are therefore rejected based upon their dependency on claims 1 and 2.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claim 1-3, 5, 10-12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hawkins et al. (US Patent Number 5,133,076).

6.   As per claim 1, Hawkins teaches a method of automatically switching between

computer-enabled input modes, comprising:

enabling a selection-based input mode whereby input is accepted via a selection-

based input device (keyboard, element 22, figure 2b, keyboard is connected, column

12, lines 17 – 19);

initiating use (stylus touches screen, column 4, lines 60 – 63) of a pen-based

input device (stylus, element 29, figure 1); and

in response to initiating use of a pen-based input device, automatically switching

from the selection-based input mode to a pen-based input mode without user input

(overlay controller determines coordinates and stylus functions as a pointer, column 4,

lines 63 – 65).

The examiner notes the switching of modes from a pen-based to selection-based

modes are done through the utilization of hardware interrupts on the interrupt line

(element 436, figure 10). The examiner further notes on the user end hardware

computational method of Hawkins translate to automatic behavior as claimed by the

applicant and will be applied as selection without additional user input for claims 1 -

7.   As per claim 2, Hawkins teaches a method comprising initiating use of a

selection-based input device; and

in response to initiating use of a selection-based input device, automatically

switching from the pen-based input mode back to the selection-based input mode

without user input (shifts from keyboard emulation mode to actual keyboard interaction,

column 12, lines 17 – 53).

8.   As per claim 3, Hawkins teaches a method prior to enabling a selection-based

input mode selecting an automatic input switching mode (based on interrupts for

keyboard switches between pen emulation and keystroke modes, column 12, 47 – 53).

9.   As per claim 5, Hawkins teaches a method whereby the selection-based input

device is a keyboard (keyboard, element 22, figure 2b).

10.   As per claim 10, Hawkins teaches a method further comprising latching the pen-

based input device so that the pen-based input device behaves as a selection-based

input device (by touching the display on the bottom segment 13b pen is latched into the

keyboard emulation mode, column 9, lines 49 – 53, figure 6).

11.   As per claim 11, Hawkins teaches a method whereby while the pen-based input

device is latched for behavior as a selection-based input device, using the pen-bases

input device as a selection-based input device (pen is used for keyboard emulation ,

figure 6, stylus may emulate a mouse or enter keystroke data, column 9, lines 49 – 53).

12.   As per claim 12, Hawkins teaches a method comprising initiating use of the

selection-based input device; and

in response to initiating use of the selection-based input device, automatically

unlatching the pen-based input device from behaving as a selection-based input device

(shifts from keyboard emulation mode to actual keyboard interaction, column 12, lines

17 – 53).

13.   As per claim 14, Hawkins teaches a method whereby initiating use of the

selection-based input device includes selecting a keyboard key (keyboard, element 22,

figure 2b).

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

15.   Claims 4, 6-9, 13, 15, 16, and 17-20 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Hawkins in view of Chang (US Patent Number 5,063,376).

16.   As per claim 4, Hawkins fails to teach a method whereby the selection-based

input device is a mousing device.

In an analogous method Chang teaches a method whereby the selection-based

input device is a mousing device (figure 1, column 5, lines 14 – 23).

It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to modify the method of Hawkins with the above teachings of

Chang. One of ordinary skill in the art would have been motivated to make such

modification in order to have a more dynamic key enabled in combination with a

pointing device in one unit as a peripheral as a conventional keyboard (column 7, lines

32- 33).

17.   Hawkins as modified by the teachings of Chang as applied in claim 4 above, as

per claim 6, Hawkins teaches a method comprising latching (analog mode, column 3,

lines 45 – 47) the selection-based input device so that the selection-based input device

behaves as a pen-based input device (allows for pen functionality in drawing, column 3,

lines 31 – 39).

18.   Hawkins as modified by the teachings of Chang as applied in claim 4 above, as

per claim 7, Hawkins teaches a method whereby while the selection-based input device

is latched for behavior as a pen-based input device, using the selection-based input

device as a pen-based input device (when in analog mode allows for drawing with

features of depth, column 3, lines 40 – 57).

19.   As per claim 8, Hawkins teaches a method further comprising initiating use of the

pen-based input device; and

in response to initiating use of the pen-based input device, automatically

unlatching the selection-based input device from behaving as a pen-based input device

(when the stylus touches screen pen is initiated, column 4, lines 60 – 63).

20.   As per claim 9, Hawkins teaches a method whereby initiating use of the pen-

based input device includes movement of the pen-based input device whereby said

pen-based input device is operative to input data when the pen-based input device is

engaged with a computer-enabled display screen operative to receive input from the

pen-based input device (stylus touches screen, column 4, lines 60 – 63).

21.   Hawkins as modified by the teachings of Chang as applied in claim 4 above, as

per claim 13, Chang teaches a method whereby initiating use of the selection-based

input device includes moving a mousing device (figure 1, column 5, lines 14 – 23).

22.   As per claim 15, Hawkins teaches a method of automatically switching between

computer-enabled input modes, comprising:

    enabling a selection-based input mode whereby input is accepted via a selection-

based input device (keyboard, element 22, figure 2b, keyboard is connected, column

12, lines 17 – 19);

    initiating use of a computer-enabled electronic pen (stylus, element 29, figure 1)

operative to input data when the electronic pen is engaged with a computer-enabled

display screen operative to receive input from the electronic pen (stylus touches screen,

column 4, lines 60 – 63);

in response to initiating use of the computer-enabled electronic pen,

automatically switching from the selection-based input mode to a pen-based input mode

(KBEP monitoring the overlay controller allows for initiating of pen to bring about pen

based use along with handwriting software, column 10, lines 13 - 33).

Hawkins fails to teach a method of automatically switching between computer-

enabled input modes, comprising: initiating use of a mousing device; and in response to

initiating use of the mousing device, automatically switching from the pen-based input

mode to the selection-based input mode.

In an analogous method, Chang teaches a method of automatically switching

between computer-enabled input modes, comprising: initiating use of a mousing device

(figure 1, column 5, lines 14 – 23); and in response to initiating use of the mousing

device, automatically switching from the pen-based input mode to the selection-based

input mode (used as a conventional mouse as discerned by software, column 7, lines

42 – 52).

It would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to modify the method of Hawkins with the above teachings of

Chang. One of ordinary skill in the art would have been motivated to make such

modifications in order to allow for a more dynamic selection-based pointing device in

portable system.

23.   Hawkins as modified by the teachings of Chang as applied in claim 15 above, as

per claim 16, Chang teaches a method whereby the selection-based input device is a

mousing device (figure 1, column 5, lines 14 – 23).

24.   As per claim 17, Hawkins teaches a method whereby the selection-based input

device is a keyboard (keyboard, element 22, figure 2b).

25.   As per claim 18, Hawkins teaches a method of automatically switching between

computer-enabled input modes, comprising:

        enabling a selection-based input mode whereby input is accepted via a selection-

based input device (keyboard, element 22, figure 2b, keyboard is connected, column

12, lines 17 – 19);

        initiating use of a pen-based input device (stylus touches screen, column 4, lines

60 – 63);

        in response to initiating use of a pen-based input device, automatically switching

from the selection-based input mode to a pen-based input mode (KBEP monitoring the

overlay controller allows for initiating of pen to bring about pen based use along with

handwriting software, column 10, lines 13 - 33);

        initiating use of a selection-based input device (keyboard interaction, column 12,

lines 40 – 43);

        in response to initiating use of a selection-based input device, automatically

switching from the pen-based input mode back to the selection-based input mode (shifts

from keyboard emulation mode to actual keyboard interaction, column 12, lines 17 –

53);

latching the pen-based input device (by touching the display on the bottom

segment 13b, column 9, lines 49 – 53) so that the pen-based input device behaves as a

selection-based input device (stylus may emulate a mouse or enter keystroke data,

column 9, lines 49 – 53);

initiating use of the selection-based input device (keyboard interaction, column

12, lines 40 – 46); and

in response to initiating the use of the selection-based input device, automatically

unlatching the pen-based input device from behaving as a selection-based input device

(shifts from keyboard emulation mode to actual keyboard interaction, column 12, lines

17 – 53).

Hawkins fails to teach a method of automatically switching between computer-

enabled input modes, comprising: latching the selection-based input device so that the

selection-based input device behaves as a pen-based input device; and initiating use of

the pen-based input device, and in response to initiating use of the pen-based input

device, automatically unlatching the selection-based input device from behaving as a

pen-based input device.

Chang teaches in analogous method, latching the selection-based input device

so that the selection-based input device behaves as a pen-based input device; and

initiating use of the pen-based input device, and in response to initiating use of

the pen-based input device, automatically unlatching the selection-based input device

from behaving as a pen-based input device (discerned by software to be utilized as a pointing device, column 7, lines 42 – 52).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method of Hawkins with the above teachings of Chang. One of ordinary skill in the art would have been motivated to make such modifications in order to allow for a more dynamic selection-based pointing device in portable system.

26.   Hawkins as modified by the teachings of Chang as applied in claim 15 above, as per claim 19, Chang teaches a method whereby initiating use of the selection-based input device includes moving a mousing device (figure 1, column 5, lines 14 – 23).

27.   As per claim 20, Hawkins teaches a method whereby initiating use of the selection-based input device includes selecting a keyboard key (keyboard, element 22, figure 2b).

Conclusion

28.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Number 6,128,007 teaches a system of automatically switching between a cursor and input mode relating to a pen-based and selection-based input. US Patent Number 6,243,258 teaches a system comprising a pen-based,

selection-based input, and a physical switching mechanism that requires no user input

to toggle between input device selections.

29. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Aurangzeb Hassan whose telephone number is (571)

272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30

PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Huynh can be reached on (571)272-4147. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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4/4/2006